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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,928	01/29/2002	Michel Daage	JSS-0206	9576

7590 04/24/2003  
ExxonMobil Research and Engineering Company  
P.O. Box 900  
Annandale, NJ 08801-0900

EXAMINER
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STRICKLAND, JONAS N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 04/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/059,928

Applicant(s)

DAAGE ET AL.

Examiner

Jonas N Strickland

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to:
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.

- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Lapidus et al. (US Patent 6,331,574 B1).

Applicant claims a process for the treatment of a used, supported catalyst comprising one or more members selected from the group consisting of Co, Ni, Cu, Ru, Rh, Re, Pd, Pt, Os, and Ir, the process comprising the following steps: decreasing the hydrocarbon content; impregnating under a non-oxidative atmosphere with a solution of at least one of an ammonium salt and an alkyl ammonium salt, optionally in combination with up to about five moles of ammonia per liter of solution; oxidizing with a gaseous oxidant in the presence of the impregnating solution; and reducing with a hydrogen-containing gas at elevated temperatures thereby forming an active catalyst.

Lapidus et al. discloses a process for the preparation of high activity carbon monoxide hydrogenation catalysts, especially for Fischer-Tropsch reactions. Lapidus et al. continues to disclose wherein the catalyst contains cobalt as well as rhenium or metals from Group VIIB, which are supported on a refractory inorganic oxide support (col. 1, lines 34-37 and col. 2, lines 20-31). Lapidus et al. continues to disclose wherein the catalyst is contacted with a liquid or solution (a solvent, which would inherently

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decrease the hydrocarbon content; col. 3, lines 39-41). Lapidus et al. continues to disclose impregnating the catalyst with a poly- or multidentate ligandous compound, such as an ammonium containing salt (col. 5, line 55 - col.6, line 38). Lapidus et al. continues to disclose wherein after impregnation, the catalyst may be dried, and calcined ; suitably by contact with oxygen, air or other oxygen-containing gases, as well as wherein the catalyst is reduced with a hydrogen-containing gas (col. 2, lines 1-6). The oxidation step occurs at 100°C (col. 5, line 21). Lapidus et al. continues to disclose wherein the catalyst is reduced under hydrogen at 400°C (col. 16, lines 43-45). Lapidus et al. continues to disclose a fractionator, with respect to claims 23 and 25 (col. 8, line 45).

With respect to claim 4, the impregnated solution disclosed by Lapidus is less than an amount that would be required to convert the catalytic metal to the corresponding salt.

With respect to claims 5 and 6, it would have inherent to have nitrates, carbonates, acetate, citrate and carboxylate as the ammonium salts, since Lapidus et al. discloses impregnating any suitable ammonium salt.

With respect to claims 7, 10, 11 and 16, it would have been inherent for the impregnating solution to meet the desired pore volume, the oxidant atmosphere, as well as the concentration of ammonia, since Lapidus et al. discloses wherein impregnating a supported catalyst with an ammonium salt increases the activity of a used catalyst, as well as having an oxidant atmosphere, which may also include a non-oxidative gas (col. 2, lines 1-6).

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**Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. WO 01/49809 A1.

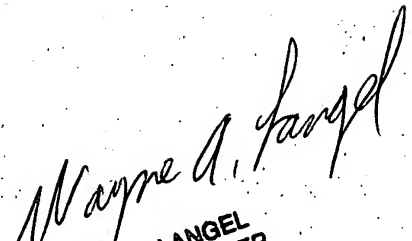
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH. 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.



Jonas N. Strickland  
April 17, 2003



WAYNE A. LANGEL  
PRIMARY EXAMINER